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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,018	07/11/2003	I-Fong Chen	BHT-3103-147	2704

7590 06/22/2005
BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

CUMMING, WILLIAM D

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,018

Applicant(s)

CHEN

Examiner

WILLIAM D CUMMING

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Drawings

1. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mobile phone and the related circuit as stated by claim 1, the matching circuit as stated by claim 3 and the amplifying circuit as stated by claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "*amended*." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification inadequately disclose the related circuit as stated by claim 1, the matching circuit as stated by claim 3 and the amplifying circuit as stated by claim 4. The "*written description*" of the invention required by first paragraph of 35 USC §112 is separate and distinct from that paragraph's requirement of enabling disclosure, since description must do more than merely provide explanation of how to "*make and use*" the invention. Applicant must also convey, with reasonable clarity to those skilled in the art, that applicant, as of the filing date sought, was in possession of the invention, with the invention being, for purpose of "*written description*" inquiry, whatever is presently claimed. Drawings alone may, under proper circumstances, provide "*written description*" of the invention required by 35 USC §112, and whether the drawings are from design application or utility application is not determinative. In order to satisfy "*written description*" requirement of 35 USC §112, the proper test is whether drawings conveys, with reasonable clarity to those of ordinary skill in the art, the claim subject matter.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Petropolous**.

Petropolous discloses a hidden planar antenna module (figure 4) for a mobile phone (Paragraph 22), said module is provided with a base plate having a predetermined area (figure 4), said base plate has on a surface thereof a first micro-strip section (#14) and a second micro-strip section (#13) being in relation with wavelengths of corresponding operation frequencies; the front ends of said micro-strip sections make an open circuit, the tailing ends of said micro-strip sections are connected to be used as a third micro-strip section of a feed line (#16); said second micro-strip section (#13) connected with said tailing end of said first micro-strip section forms an open stub for adjusting frequency width and impedance matching; said module is characterized by that: said feed line is connected with micro-strips of a related circuit (#12) and a grounding line to form said antenna module with a coplanar wave guide effect.

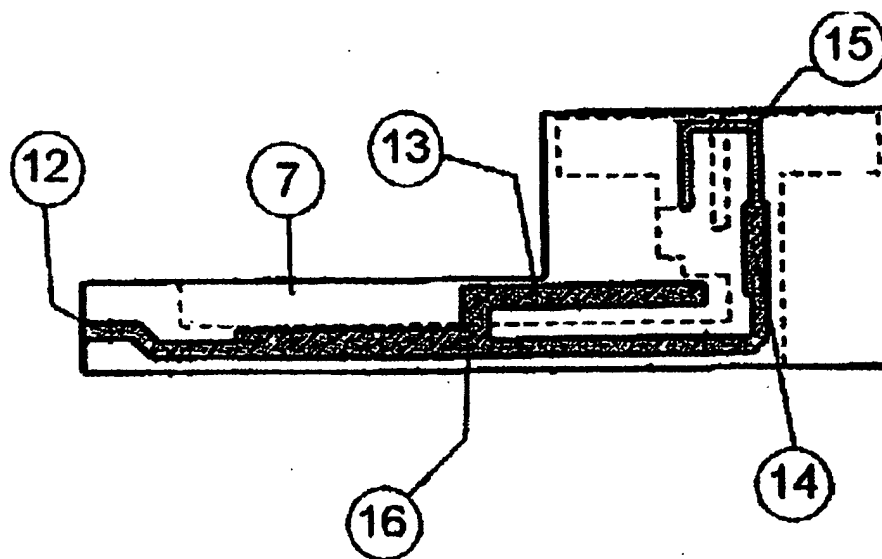


Figure 4

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Petropolous** in view of **Tsukamoto, et al** (both patents).

Petropolous disclose all subject matter, except for the antenna module as a flexible printed circuit and the amplifying circuit. The examiner takes Official Notice that an antenna module as a flexible printed circuit and the amplifying circuits are well known in the art and not invented by applicant. The examiner provides **Tsukamoto, et al** as evidence. Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the well known use of the antenna module as a flexible printed circuit and the amplifying circuit in the planner antenna module of **Petropolous** in order to make the antenna module light weight and amplify the signal to and from the antenna module.

Conclusion

11. Replacement Notice: Copies of Patent Application Records will be Provided in both Electronic and Paper Form

The Official Gazette notice, published on August 24, 2004 entitled "*All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form*" (1285 Off. Gaz. Pat. Off, August 24, 2004) is hereby rescinded. The USPTO is reinstating, until further notice, the procedures in effect prior to July 30, 2004 for providing certified copies of patent application records with paper certification statements. The USPTO will also offer electronic certified copies of patent application records at the requester's option.

Certified Copies with Paper Certification

Unless otherwise requested, certified copies of patent application records provided pursuant to 37 CFR 1.19 (b) will be produced with a paper certification statement, continuing the practice in effect prior to July 30, 2004. The certification statement will include an embossed seal and original signature.

Certified Copies with Electronic Certification

Customers ordering certified copies of patent applications as filed or patent-related file wrapper and contents of published applications from the USPTO website will have the option to choose electronic copies with electronic certification. These files include an imaged certification statement as part of a PDF file containing the document TIFF images. These electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. Customers may choose to download these electronic files from the USPTO website or receive them on compact disc.

Paris Convention for the Protection of Industrial Property and Priority

Irrespective of whether the USPTO provides a paper certified copy or an electronic certified copy, Article 4(d)(3) of the Paris Convention prohibits any country that is a member of the convention from requiring further authentication of the certified copy for purposes of claiming priority under the Paris Convention. (The text of the Paris Convention and a list of its members are available at www.wipo.int/treaties/en/ip/paris/index.html.)

The USPTO is working with other intellectual property offices to encourage the acceptance of priority documents in electronic form with electronic certification. A list of offices and international intellectual property organizations that have agreed to accept electronic certified copies will be posted on the USPTO website soon, and updated regularly.

Questions should be directed to the Office of Public Records by email to opr@uspto.gov or by telephone at (703) 308-9743.

12. If applicants wish to request for an interview, an *"Applicant Initiated Interview Request"* form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed *"Applicant Initiated Interview Request"* form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

13. Consolidated Appropriations Act, 2005 enacted on December 8, 2004

H.R. 4818, the Consolidated Appropriations Act, 2005 (Consolidated Appropriations Act) was signed by President George W. Bush and enacted into law on December 8, 2004. The Consolidated Appropriations Act revises certain patent application and maintenance fees; provides separate fees for a basic filing fee, a search fee, and an examination fee; and requires an additional fee for any patent application whose specification and drawings exceed 100 sheets of paper (application size fee). The new patent fees are now effective and will remain in effect during the remainder of fiscal year 2005 and during fiscal year 2006. The patent maintenance fee changes apply to any maintenance fee payment made on or after December 8, 2004, regardless of the filing or issue date of the patent for which the fee is submitted. The revised maintenance fees took effect on December 8, 2004. Thus, any maintenance fee paid at any time on (or after) December 8, 2004 is subject to the revised maintenance fee amounts set forth in the Consolidated Appropriations Act.

Note: If you are paying via the USPTO's Internet Web site, there will likely be a delay in updating the maintenance-fee information on the USPTO's Office of Finance On-Line Shopping Web page. Therefore, if paying on-line, please refer to the updated fee schedule to ensure that you include the appropriate updated fee amount. Maintenance fees must be timely paid in the appropriate amount to avoid expiration of a patent.

The new basic filing fee (or national fee), search fee, examination fee, and application size fee apply to national patent applications (other than provisional applications) filed on or after December 8, 2004, and to international patent applications in which the basic national fee is paid on or after December 8, 2004. The new provisional application filing fee applies to any provisional application filing fee paid on or after December 8, 2004. The filing fee (or national fee), search fee, and examination fee are due on filing. If the filing fee (or national fee) is paid on filing, but the search fee and/or examination fee is missing, the USPTO will issue a notice requiring that any missing search fee and examination fee (but no surcharge until further notice) be paid within a specified period of time in order to avoid abandonment. Thus, if at least the full basic filing fee under the Consolidated Appropriations Act is paid on or after December 8, 2004, the USPTO will issue a notice requiring any balance of the search fee and the examination fee (but no surcharge).

The remaining patent application fee changes, including the excess claims fees, extension of time fees, and appeal fees, apply to any fee payment made on or after December 8, 2004, regardless of the filing date of the application for which the fee is submitted.

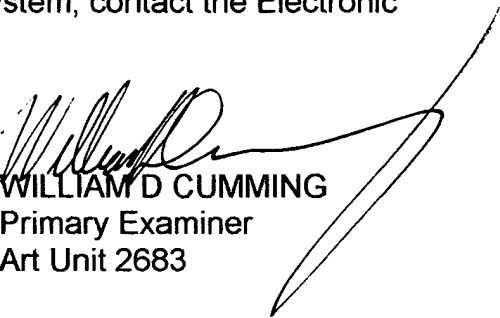
USPTO customers should monitor the USPTO's Internet Web site frequently for current patent fee information.

Payments from foreign countries must be payable and immediately negotiable in the United States for the full amount of the fee required.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **WILLIAM D CUMMING** whose telephone number is 571-272-7861. The examiner can normally be reached on Tuesday & Wednesday, 10:30am to 8:30pm,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


WILLIAM D CUMMING
Primary Examiner
Art Unit 2683

Wdc



UNITED STATES
PATENT AND
TRADEMARK OFFICE

William Cumming
Primary Patent Examiner
William.Cumming@uspto.gov